UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,412	04/10/2006	Philip Steven Newton	FR 030123	3707
	7590 12/11/200 LLECTUAL PROPER	EXAMINER		
P.O. BOX 3001			GIARDINO JR, MARK A	
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			2185	
			MAIL DATE	DELIVERY MODE
			12/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/575,412

Filing Date: April 10, 2006 Appellant(s): NEWTON ET AL.

Gregory L. Thorne (#39,398)

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/21/2008 appealing from the Office action mailed 5/19/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

Page 2

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2003/0061504	Sprigg et al.	3-2003
6,904,232	Ayat et al.	6-2005
6,414,920	Lee	6-2002

Art Unit: 2185

4,577,289	Comerford et al.	3-1986
5,724,425	Chang et al	3-1998
6,292,874	Barnett	9-2001
5,881,228	Atkinson et al	3-1999
2001/0011338	Bonola	8-2001
6,629,113	Lawrence	9-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 7, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sprigg et al (US 2003/0061504), hereinafter Sprigg.

Regarding Claim 1, Sprigg teaches a device comprising:

A local storage arrangement for storing a plurality of data items (storage 119 in Figure 1);

A receptacle for receiving a removable storage carrier storing a software application (I/O Device 125, also see paragraph 0026 for a list of removable carriers such as a CD-ROM or floppy disk);

A storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit is inherently present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a portion of the local storage arrangement], paragraph 0013 in Sprigg)

and referencing a portion with identification information (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) respecting respective access rights to a data item stored in the portion granted to the software application ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg) stored on the removable data carrier ("the applications 135 may be received...via the I/O device [the I/O device corresponding to the removable data carrier," so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

Regarding Claim 2, Sprigg teaches all limitations of Claim 1, wherein the storage management unit comprises Application Programming Interfaces that control an access to the local storage arrangement (paragraph 0030).

Regarding Claim 3, Sprigg teaches all limitations of Claim 1, wherein the access rights include at least one of the following with respect to the data item: viewing, reading, executing, accessing, retrieving, deleting, writing, and saving (see Paragraph 0022, where applications may be denied access to other applications).

Regarding Claim 7, Sprigg teaches all limitations of Claim 1, wherein the identification information includes an identifier of the software application (see Paragraph 0038, where the name of the software application is used as the identifier).

Regarding Claim 11, Sprigg teaches all limitations of Claim 1, wherein the storage management unit causes one or more data items not comprised in the allocated portion to be hidden from the software application (paragraph 0039, also see Figure 3).

Regarding Claim 12, Sprigg teaches all limitations of Claim 1, wherein the portion comprises the item only (last two sentences of paragraph 0039).

Regarding Claim 13, Sprigg teaches all limitations of Claim 1, wherein the storage management unit grants no access rights to the software application with respect to other data items stored outside the allocated portion (paragraphs 0039 and 0040).

Regarding Claim 14, Sprigg teaches all limitations of Claim 1, wherein the storage management unit hides to the software application other data items stored outside the allocated portion (paragraphs 0039 and 0040).

Regarding Claim 15, Sprigg teaches a method for managing a local storage arrangement in a device comprising:

Allocating a portion of the local storage arrangement to an optical storage carrier inserted in the device (see paragraph 0013, also see paragraph 0026 for removable carriers, among which the optical CD-ROM is listed);

Granting access rights to a software application stored on the carrier with respect to a data item stored in the portion (see Paragraph 0022, where applications may be denied access to other applications); and,

Including in the portion identification information respecting the access rights (see paragraph 0034, 0037, and 0038 for identification information) of the application

stored on the carrier ("the applications 135 may be received... via the I/O device", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

.

Claims 4, 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Ayat (US 6,904,232) and Lee (US 6,414,920).

Regarding Claim 4, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach where the identification information includes an identifier of the removable storage carrier. Ayat teaches Burst Cutting Area information being read from an optical device to a host (Column 1 Lines 12-14 and Column 1 Lines 26-33, also see Figure 2B in Ayat). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have used this identification information for the information described in Claim 1. Lee provides the motivation when he states that by adding and using this information to a disc, one may obtain the benefit of a harder to duplicate disc (Column 1, Lines 15-23 in Lee).

Regarding Claim 6, the combined device meets all limitations of Claim 4, wherein the identification information is a Burst Cutting Area as described above.

Regarding Claim 20, Sprigg teaches a device comprising:

a local storage arrangement for storing a plurality of data items (119 in Figure 1);

a receptacle for receiving a removable storage carrier storing a software application (I/O Device 125, also see paragraph 0026 for a list of removable carriers);

a storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier (a storage management unit must be present for "receiving the application [from the remote storage carrier] at the device, [and] storing the application in a storage on the device [this storage on the device corresponding to a portion of the local storage arrangement, paragraph 0013 in Sprigg) and referencing the portion with an identifier (the identification information corresponding to "a unique identifier to distinguish it from other applications", Paragraph 0034 in Sprigg, also see Figure 4, step 400) and respecting respective access rights to a data item ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg) stored in the portion granted to the removable storage carrier ("the applications 135 may be received...via the I/O device", so the application is stored on and received from the removable data carrier, Paragraph 0028 in Sprigg).

However, Sprigg does not teach where the identification information includes an identifier of the removable storage carrier. Ayat teaches Burst Cutting Area information being read from an optical device to a host (Column 1 Lines 12-14 and Column 1 Lines 26-33, also see Figure 2B in Ayat). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have the identification information of Sprigg to include an identifier of the

removable storage carrier as in Ayat. Lee provides the motivation when he states that by adding and using this information to a disc, one may obtain the benefit of a harder to duplicate disc (Column 1, Lines 15-23 in Lee).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg, Ayat, and Lee as applied to Claim 4 and 6 above, and further in view of Comerford (US 4,577,289).

Sprigg and Ayat teach all limitations of Claim 4 as discussed above. However, they do not teach where the identification information includes a unique identification number associated with the removable storage carrier. Comerford teaches storing a unique key on an individual disk (Column 2 Lines 63-68 in Comerford). It would have been obvious to a person having ordinary skill in the art to which the subject matter pertains to have included this unique identification number in the identification information of Claim 1. As motivation, this will help prevent piracy, since a machine will be able to determine if a medium is an original or a copy (see Column 2 Lines 35-38 in Comerford). Thus, by combining the devices, additional benefits are obtained.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Chang (US 5,724,425).

Sprigg meets all limitations of Claim 1 are discussed above. However, Sprigg does not teach where the identification information is a representative of a publisher of the removable storage. Chang teaches information representing the publisher of an

application being sent to a host computer (Column 3 Lines 15-37 in Chang). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have used this information as the identification information in Claim 1. Chang provides motivation, since it provides a way "for authenticating that software distributed by a manufacturer is a legitimate copy of an authorized software release, and that the software contains only the original manufacturers code without tampering" (Column 3 Lines 1-5 in Chang). Thus, by combining the two devices, additional benefits are obtained.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Barnett (US 6,292,874).

Regarding Claims 9 and 10, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach the storage management unit further enabling the software application to store additional data items in the allocated portion. Barnett teaches segregating applications such that each has its own memory space, where data other than identification information is also stored in this space (Column 3 Lines 7-11 in Barnett, also see Figure 3 in Barnett). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have allowed applications to store additional data items. As motivation, allowing applications to store additional data on the computer allows for faster access time (by allowing the data be placed in a CPU cache or RAM) compared

to reading all data from the removable storage carrier. Thus, by combining the devices, additional benefits are obtained.

The combined device also meets the limitations of Claim 10, since the size of each application is limited (Column 3 Lines 11-18 in Barnett).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Atkinson et al (US 5,881,228).

Regarding Claim 16, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not explicitly teach allocating an equal size portion to each storage carrier. Atkinson teaches allocating an equal amount of memory to each external device ("each external device is allocated a memory space", Column 2 Lines 50-51, also see Figure 3, where each external device has the same amount of memory space). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have allocated an equal size portion to each external device as in Atkinson for the storage carriers as in Sprigg, since allocating an equal size portion does not require complex calculation and is easier to implement than dynamically allocating a memory range. Thus, by combining the devices, additional benefits are obtained.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Bonola (US 2001/0011338).

Art Unit: 2185

Regarding Claim 17, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not explicitly teach allocating a size of a portion based on requirements of the application. Bonola teaches allocating memory to an application based on requirements of the application ("The application…identifies an unallocated region of memory that is appropriately sized, and allocates the memory to the application", abstract of Bonola, where "appropriately sized" corresponds to being sized according to the requirements of the application).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have used the allocation system of Bonola for the applications of Sprigg, because allocating memory based on the requirements of the application does not waste as much memory as a static allocation would.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprigg in view of Lawrence (US 6,629,113).

Regarding Claim 18, Sprigg teaches all limitations of Claim 1 as discussed above. However, Sprigg does not teach the storage management unit adapting the size of the portion over time. Lawrence teaches collecting memory from applications that are no longer in use, thus adapting the size ("a garbage collector...performs garbage collection to reclaim the memory space used by objects that are no longer referenced by an application, Column 1 Lines 31-35 in Lawrence).

Art Unit: 2185

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains to have adapted the size of the portion of memory over time to avoid wasting memory on objects that are not referenced anymore.

Regarding Claim 19, Sprigg and Lawrence teach all limitations of Claim 18 as discussed above, wherein the memory management unit enlarges the size of the portion by reducing a size of another portion of the local storage arrangement allocated to another removable storage carrier ("the reclaimed memory is then recycled by reallocating the memory space for other objects", Column 1 Lines 34-35 in Lawrence).

(10) Response to Argument

35 USC 102(b) Rejection of Claims 1-3, 7, and 15 as being anticipated by Sprigg
At page 12 of the Appeal Brief filed 10/21/2008, Appellant argues:

"Sprigg does not provide access rights to a data item stored in the storage area 110 to the software application stored on the removable data carrier."

The examiner respectfully disagrees. In Sprigg, the software application is on the removable carrier, and is transferred to the storage on the local device (as described in paragraph 0013, "receiving the application at the device, storing the application in storage on the device", also beginning of paragraph 0026, the computer device "may receive applications...via the I/O device"). Thus, the application on removable storage carrier of Sprigg and the application on computer device 105 of Sprigg are the *same* application, i.e., the application on the local storage is the application stored on the removable data carrier.

Art Unit: 2185

Once the software application stored on the removable data carrier is allocated on a portion of the local storage arrangement [computing device 105], the application (inherently made up of data) is then granted access rights in the portion granted to the software application stored on the removable data carrier ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg).

Thus, Sprigg teaches providing access rights to a data item stored in the portion granted to the software application stored on the removable data carrier.

At page 15 of the Appeal Brief filed 10/21/2008, Appellant argues:

"Sprigg merely grants storage device access rights to an application stored in the storage device and not an application stored on the removable data carrier."

The examiner respectfully disagrees. In Sprigg, the software application is on the removable carrier, and is transferred to the storage on the local device (as described in paragraph 0013, "receiving the application at the device, storing the application in storage on the device", also beginning of paragraph 0026, the computer device "may receive applications…via the I/O device"). Thus, the application on removable storage carrier of Sprigg and the application on computer device 105 of

Sprigg are the *same* application, i.e., the application on the local storage is the application stored on the removable data carrier.

35 USC 103(a) Rejection of Claims 4, 6, and 20 as unpatentable over Sprigg in view of Ayat and Lee

At page 16 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claims 4 and 6 as depending from claim 1. The Examiner has addressed this argument above.

At page 16 of the Appeal Brief filed 10/21/2008, Appellant argues:

"Sprigg alone and in view of Ayat and Lee does not disclose or suggest a device that amongst other patentable elements comprises "a storage management unit for allocating a portion of the local storage arrangement to the removable storage carrier and referencing the portion with the identifier respecting respective access rights to a data item stored in the portion granted to the removable storage carrier."

The examiner respectfully disagrees. In Sprigg, the software application is on the removable carrier, and is transferred to the storage on the local device (as described in paragraph 0013, "receiving the application at the device, storing the application in storage on the device", also beginning of paragraph 0026, the computer device "may receive applications...via the I/O device"). Thus, the application on removable storage carrier of Sprigg and the application on computer device 105 of

Sprigg are the *same* application, i.e., the application on the local storage is the application stored on the removable data carrier.

Once the software application stored on the removable data carrier is allocated on a portion of the local storage arrangement [computing device 105], the application (inherently made up of data) is then granted access rights in the portion granted to the software application stored on the removable data carrier ("if the application has privilege to the file's location...then the application is granted access to the file. If the application is not permitted access to the file's location, access is denied", Paragraph 0055 in Sprigg, also "the application is granted access to a portion of the storage...[and] the application is denied access to the storage area outside the granted portion" in the abstract of Sprigg).

Thus, Sprigg teaches allocating a portion of the local storage arrangement to the removable storage carrier and referencing the portion with the identifier respecting respective access rights to a data item stored in the portion granted to the removable storage carrier.

35 USC 103(a) Rejection of Claim 5 as unpatentable over Sprigg, Ayat, and Lee in view of Comerford

At page 18 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claim 5 as depending from claim 1. The Examiner has addressed this argument above.

35 USC 103(a) Rejection of Claim 8 as unpatentable over Sprigg in view of Chang

At page 19 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claim 8 as depending from claim 1. The Examiner has addressed this argument above.

35 USC 103(a) Rejection of Claims 9 and 10 as unpatentable over Sprigg in view of Barnett

At page 20 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claims 9 and 10 as depending from claim 1. The Examiner has addressed this argument above.

35 USC 103(a) Rejection of Claim 16 as unpatentable over Sprigg in view of Barnett

At page 21 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claim 16 as depending from claim 1. The Examiner has addressed this argument above.

35 USC 103(a) Rejection of Claim 17 as unpatentable over Sprigg in view of Bonola

Art Unit: 2185

At page 22 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claim 17 as depending from claim 1. The Examiner has addressed this argument above.

35 USC 103(a) Rejection of Claims 18-19 as unpatentable over Sprigg in view of

<u>Lawrence</u>

At page 23 of the Appeal Brief filed 10/21/2008, Appellant argues the patentability of claims 18-19 as depending from claim 1. The Examiner has addressed this argument above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Mark Anthony Giardino/

/Kevin L Ellis/ Acting SPE of Art Unit 2187

/Sanjiv Shah/ Supervisory Patent Examiner, Art Unit 2185